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ABSTRACT

This report contains addresses and symposium discussions presented at the conference on teacher competence for the middle school years (fifth or sixth through eighth grades) which was attended by about 100 educators for various levels and positions. The foreword lists three questions posed by emergence of the middle school movement which the conferenc e focused on: Are there some teaching strategies and staff utilization patterns which hold promise for improving education in the middle school years? Are there special competencies needed by teachers who would work with middle school students? If so, can better programs be provided for preparation of such teachers? A six-member symposium discussion follows each of five groups of presentations: 1) "The Special Case of Early Adolescents" by Samuel H. Popper and "Teachers for the Middle Schools" by William W. Wattenberg; 2) "Learning Through Discovery in the Fifth Grade" by R. E. Meyers and "Teaching Thinking on the Synthesis Level" by Burton L. Grover; 3) "What a Middle School Might Be Like" by William Alexander" 4) "Establishing Objectives for Individualized Instruction" by John Downs, "Team Teaching in the Block-Time Class" by Lloyd Johansen, and "Flexible Scheduling for the Middle School Years: The Fluid Block Plan" by Almon Hoye; 5) "Preparing Teachers for the Middle School Years" by Emmett L. Williams. The director's conference summary and selected participant evaluation comments are also included. (JS)

ED044369

TEACHER COMPETENCE

for

THE MIDDLE SCHOOL YEARS

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Report of a conference held August 6-11, 1967

at the University of Minnesota-Duluth

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FOREWORD

In August 1967 about 100 educators from a variety of levels and positions in education met at the University of Minnesota, Duluth, for a conference on the theme, "Teacher Competence for the Middle School Years." This is a report of that conference.

Those attending included teams of four or more persons, teachers and administrators, from ten school districts which had formed a consortium to re-study their educational programs for the middle school years. Other participants represented colleges and universities, state departments of education, and professional organizations.

The conference was sponsored by the Upper Midwest Regional Educational Laboratory, and was an outgrowth of UMREL's association with the West Fargo, North Dakota schools in their attempt to prepare teachers to staff a new middle school. The term "middle school" is defined differently by different persons, but is commonly understood to mean a school made up of fifth, or sixth, through eighth grades.

In answer to hundreds of requests for information about the middle school, bibliographies and reprints of articles from recent journals were mailed out. But UMREL also wished to provide an opportunity for representative educators from the region to consider more extensively some of the questions posed by emergence of the middle school movement, including:

> Are there some teaching strategies and staff utilization patterns which hold promise for improving education in the middle school years?
>
> Are there special competencies needed by teachers who would work with students in the middle school years?
>
> If so, can better programs be provided for the preparation of teachers for the middle school years?

Any instructional program depends to a great extent upon the competence of individual teachers. And the administrative organization of schools by ages or grades is probably of less significance ultimately than their internal organization for instruction. Nevertheless, school districts must choose a pattern of organization which appears to be most appropriate for them. We hope that the information and ideas found in these proceedings will be helpful.

Each article is, of course, a condensed version of a much longer presentation. We regret the necessity to omit much of what each speaker said, but we think that what remains is valuable for its brevity.

Ron Brandt
Program Coordinator

WELCOME

John Prasch
Executive Director, UMREL

I think it appropriate that I give you a little of the background of UMREL's involvement in the study of teacher competence for the middle school years. In addressing itself to the larger problem of teacher competency it is obviously necessary that the Laboratory look at different facets or dimensions of the problem. One of these is the dimension of organizational changes which teachers must face. We see all kinds of changes taking place; one that we have selected for the Laboratory to examine is the organizational pattern for the middle school years.

I suspect that the most compelling reason we felt we should look at this organizational change is because of its clear relationship to the preparation of teachers. It occurs to us that although the junior high school has been with us for a long time, we have never developed adequate programs of teacher preparation for people who will staff this type of school. And if we are now talking of a different pattern of organization for this age group, it is all the more necessary that we look at problems of teacher preparation. Then, of course, the subject is timely, as you well know. This was evident to us as we worked with West Fargo, North Dakota, on their problem of preparing teachers for their new middle school.

Our strategy for attacking this problem is to attempt to put together a consortium of school districts which, because of their interest, or the direction they are moving, or because of regional representation, would be an appropriate grouping with which to work. And as part of this consortium we are also involving some teacher preparation institutions. We think this fits our general strategy very neatly because there are many things that school people can do together which none of us can do effectively alone. This conference is our first working arrangement for the consortium -- the beginning of what we hope will be a useful relationship of the school districts and teacher preparation institutions involved. It is UMREL's intention to provide resources to the consortium of a continuing nature, and to provide opportunities for the members of the consortium to get together from time to time. Secondly, we expect to observe carefully the work of the consortium and report it back to the region generally. I would like to make one other point with respect to the Laboratory. I am sure that many people will see that we are sponsoring a conference which has in its title something about middle schools and they will conclude that we are promoting middle schools. This is not the case. We simply know that this is a timely subject -- we are looking at the middle school years and we are particularly interested in teacher preparation problems for this age group. But we have no product to sell.

OUR GOAL: IMPROVED EDUCATION FOR THE MIDDLE SCHOOL YEARS

Clifford Hooker
University of Minnesota

Our goal is to improve education for the middle school years. We are not here to help some people gain a little lead time on their neighbors in terms of getting on the bandwagon. Nor are we here to talk about building plans, although we know they are important. We will be talking about how to design the school program, the behavior of the teacher in the school setting, characteristics of youngsters and that sort of thing. Later we can talk about building structure to accommodate the educational program we have planned.

I hope we will not think of the middle school as just a compromise between the neighborhood school and the integrated school. You know, in a lot of our cities we have the problem of maintaining neighborhood schools and also of having integrated schools. And I'm sure some cities have thought of the middle school as a way of accelerating the point at which the neighborhood school loses some of its identity and students are integrated to some degree by associating with youngsters living a few blocks away.

And I hope you will talk about the middle school as something more than simply abolishing the title "junior high school," desirable as that might be. Several speakers will no doubt point out that the word "junior" has caused a number of problems in relation to the middle school.

Our effort here is to talk about teacher competence in the context of what seems to me to be <u>continuity</u> in education. We want to think of education as being endless, being seamless, being life-long. The only thing that makes the middle school unique is that it is consistent with what we know about the development of boys and girls in the middle school years.

We will approach this topic from several perspectives and I want to take just one minute to explain the rationale for the program. Today we will focus on the objectives of the middle school, and we will talk about the psychological characteristics of pupils in the middle school years. Tomorrow, we will focus quite specifically on behavior of teachers which stimulates creativity and learning through discovery. On Wednesday we will have some impressions of what middle schools might be like. Thursday will deal with the organization of instruction within this new school pattern: team teaching, the block of time, flexible scheduling, the fluid-block and the like. Thursday evening our speaker will focus on preparing teachers for the middle school. Friday is our summarization period in which we will try to make some sense out of what we have talked about throughout the week.

THE SPECIAL CASE OF EARLY ADOLESCENTS

Samuel H. Popper
University of Minnesota

From society's standpoint, education has a two-fold purpose: it equips youth with those cultural skills -- or instrumental capacities -- which are prerequisite for performing successfully in some future adult role, and it motivates youth on to internalize a commitment to maintain the integrity of those broad values which constitute society's value system and legitimize its life style. Therefore, the evaluative standards by which society assesses outputs of a school organization can be expressed through the properties of performance and quality.

No one who has been in a public school system for any length of time, or who is familiar with the research literature, can be oblivious to the pressures which the family and the school exert on elementary school pupils to achieve in the three R's. And by the time these pupils reach high school, pressures exerted by the universalistic standard of achievement and performance have intensified manifold. Scholastic standing, college boards, competitions sponsored by industry and government are clear evidence of this intensified pressure. Is there an extra-curricular activity in high school, for example, more generously supported by business than "junior achievement?"

And the public school organization, precisely because it is a cultural component of society, reflects in its own behavior, in its own orientation to pupils, standards which complement those of society.

Because of the human attributes of latency, pupils of elementary school grades for the most part are physiologically and psychologically capable of satisfying normative expectations of achievement. But then their period of latency ends and what Erik Erikson has called the "physiological revolution" of early adolescence begins. Now these same pupils, heretofore well composed psychologically, and most of whom have achieved in the learning environment of the elementary school, encounter difficulty in conforming to the achievement expectations of the school. School organization is threatened now with large-scale deviance in the pupil role unless some intervening ameliorative mechanism is provided in the process of socialization.

At the same time, however, cultural pressures in support of the achievement standard are relentless. No member of society is exempt from fulfilling the American value pattern of instrumental activism. Neither the sighted, the deaf, nor the lame and halt are exempt from an obligation to acquire instrumental capacities for performance in future adult roles.

So long as pupils are physiologically and psychologically capable of conforming to the regimen of a school standard all is well and good. But what happens when they can't? Obviously, large-scale deviance is threatened by such a condition. When a large segment of any social system cannot perform to its normative expectations of behavior, then, as sure as God made green apples, there will be large-scale deviance. We have noted

how public school organization copes with this problem in the "special cases" of physical infirmity and opportunity deprivation. And when we look to the total social system that is organized society, we find that the "special case" of illness, or psychological incapacity to conform to normative culture is dealt with through the mechanism of hospital organization. In much the same way, mutatis mutandis, the social system of public school organization deals with the "special case" of early adolescence.

The early adolescent we know comes apart at the psychological seam. Organismic disorganization, following Fritz Redl, and ego diffusion, following Erik Erikson are concomitants of the physiological revolution at the onset of adolescence. These pupils are overwhelmed now with self-adjustment problems, with the problem of self-meaning, with the problem of identification, with the problem of ego resynthesis. Ego is now the all-absorbing interest for the early adolescent pupil, and alter -- whether alter is a teacher, a curriculum, or school organization -- is "a significant other" for the pupil only insofar as a relation with alter helps to reduce the terrible personal anxieties of an early adolescent period.

From the point of view of the early adolescent, significant interaction with others in the school environment is measured now by the interest they have in him as a human being beset suddenly by natural and cultural problems beyond his control. If he is to find significance in interaction with teachers and curriculum -- that is, with the structure and process of school organization -- there has to be diffuseness and affectivity in their relations with him. Otherwise his motivation in the learner's role will be difficult to attain. It is a period when he needs a temporary refuge from the pressures of culture; a psychosocial moratorium as it were. This is a condition early adolescents exact from the public school organization in return for continued performance in the pupil role.

The paramount goal of the American middle school is to intervene protectively in the process of education which was begun in the elementary school, mediate between the human condition at the onset of adolescence and the pressures of culture, and continue the general education of early adolescents with a curriculum applied in a psychosocial environment which is functional for learning at this stage of socialization.

Most pupils enter public school organization in September if they will be six years old by December first of that year. Given regular attendance, no retardation, and age-grade placement, the average pupil is in a middle school from age 12.25 to 15.0. This period approximates the span of puberty -- 12.76 to 15.57 -- calculated by Stolz and Stolz.[1]

Historically, the record is clear that, from its inception, the American middle school has been differentiated on the second stage of this classification by Stolz and Stolz -- the age from about 12 to 15. Some now

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[1] H. R. Stolz and L. M. Stolz, Somatic Development of Adolescent Boys (New York: The Macmillan Co., 1951), p. 424.

claim the onset of adolescence has shifted downward because of climatic change, improved nutrition, changing class statuses, and a host of other influences. This, moreover, is offered in justification for middle school programs as early as age ten, or the fifth grade. For me this is an empirical problem, one which cannot be settled by speculation or debate. And what I have gleaned from the research literature is not supportive of middle school programs before age twelve, not when the legitimation of such programs is anchored in cultural and psychological values of early adolescent education.

There are two aspects to this problem: the period of puberty for boys and the period of puberty for girls. Because of the menarche, it is easier to establish postpubescence for girls than it is for boys. If we follow Donovan and Bosch, and hold to the criterion that attainment of sexual maturity approximately coincides with the attainment of adult body size,[2] then the 12.76 to 15.57 age span, which Stolz and Stolz give as the period of puberty for boys conforms to the institutionalized 7-9 grades of early adolescent education in the United States. Girls are said to begin puberty with the first sign of breast development. Accelerated skeletal growth begins, and menarche follows about eighteen months later with the attainment of maximum skeletal acceleration.[3]

Altogether, from what reliable data there is in the research literature at the present, it would seem that west Europeans and North Americans are growing taller, but no adequate evidence supports a secular acceleration of maturation. Television and other mass media of modern life have no doubt accelerated cultural and intellectual development in early adolescents, and this perhaps accounts for the illusion of an accelerated secular maturation. But as Wattenberg points out, modern-day early adolescents "are more dichotomized than any previous generation."[4]

As for girls, it seems to me that, despite unsure empirical evidence, the attainment of menarche by most females in our society occurs at about age thirteen plus. I put it to you, however, that in our type of society it is questionable wisdom to take a thirteen-year old girl out of the protective environment of a middle school. The value of competition which so pervasively marks our culture extends to the pursuit after a marriage partner. And in the light of comtemporary vital statistics which show between 1950 to 1959 a three-fold increase of births to girls under sixteen,[5] is there not greater social value to have a girl of thirteen and fourteen learn the nascent skills of running from a male until she catches him in a middle school rather than the high school?

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[2] B. T. Donovan and J. J. Van der Werff ten Bosch, Physiology of Puberty (Baltimore, Md.: Williams and Wilkins Col, 1956), p. 30.

[3] Ibid., p. 11.

[4] William W. Wattenberg, "Today's Junior High School Students," Educational Leadership, Vol. 23, December, 1965, p. 190.

[5] A. D. Claman and H. M. Bell, "Pregnancy in the Very Young Teen-ager," American Journal of Obstetrics and Gynecology, Vol. 90, Sept.-Dec., 1964.

Following clues gleaned from physiological literature, it seems to me that those who contemplate a downward shift of middle school grades, and justify such an administrative action on grounds of an earlier onset of the pubertal period, risk the institutional integrity of early adolescent education against outrageously high odds.

Finally, the question is: Does it matter? Does it really matter whether a middle school is of grades 5-8, or any other combination of grades? It matters very much when cultural legitimation for the unit is claimed through social values in education whose dominant orientation is to the human condition at early adolescence. What is at stake here is the institutional integrity of the American middle school. Is it the norm to admit perfectly healthy people as patients in the hospital organization? Do we admit any but handicapped pupils to programs of special education? Why, then, admit other than early adolescent pupils to a unit of school organization whose legitimation turns on the "special case" of early adolescent education?

The legitimation of the American middle school from the first has been as a school for early adolescents. Grades 7-9 were assigned to this school not out of accommodation or chance, but because the years from twelve to fifteen were defined by the science of that age as the transitional period between late childhood and postpubescent adolescence. And society wastes its resources in unrewarding duplication when a middle school is diverted from the paramount goal of early adolescent education. Once the human condition at early adolescence ceases to be the dominant focus of middle school education, then the old pattern of 8-4 school organization would have a <u>more valid</u> administrative rationale for existing than a 4-4-4 pattern. Positive intercultural and interracial attitudes, excellence in education, the cultivation of creativity, and the acquisition of cognitive skills are expected out-puts of all school units, from first grade through the twelfth, and it does not matter whether the pattern of system organization is 8-4, 6-3-3, or 4-4-4.

Cultural pressures which brought the American middle school into existence as a differentiated school for early adolescent education have intensified and multipled since the 1910 period. Will the larger social welfare be served now by abandoning this institution for any other purpose? What other social value is capable of sustaining the legitimation of a middle school's <u>right</u> to exist once its differentiated function is no longer early adolescent education?

(For a more complete treatment, see Samuel H. Popper, <u>The American Middle School</u>, Walthan, Massachusetts: Blaisdell Publishing Company, 1967.)

TEACHERS FOR THE MIDDLE SCHOOLS

William W. Wattenberg
Wayne State University

At the outset, important reservations must be stated concerning the present bandwagon-effect in the establishment of middle schools, based on the past history of the junior high school movement:

1. No evidence was ever obtained indicating with precision that children who went through 6-3-3 plans differed in any way from those going through 8-4 plans, or any of the other many variations.

2. Administrative restructuring, in and of itself, has no effect unless it provides situations which lead to decisively different modes of teacher-pupil interaction, or learning situations.

There are four factors which seem to argue for trying out the middle school arrangements:

1. The country over, junior high schools present the least satisfactory settings for teachers because of the problems emerging in group atmosphere.

2. Today's young adolescents resemble in intellectual ability and interests those who were two years older a generation ago.

3. Our present adolescents tend to dichotomize into those who are"in" and those who are alienated, and there is a hope that a school which could be flexible sooner might prevent the division.

4. Such phenomena as "the cumulative deficit" become visible about the end of the third grade.

From a psychological viewpoint the most striking thing about children in the ages usually embraced in middle schools is their diversity, the fact that they present rapidly shifting admixtures of those in different psychological stages. This is illustrated by the facts as to age of physical maturation, which roughly look like this:

Age	Percent Matured	
	Boys	Girls
11	1	10
13	10	50
15	50	90
17	99	99

Here, let us pause for a brief summary of the characteristics of late childhood, preadolescence, adolescence.

Those in late childhood are oriented to getting satisfaction from adults and are fairly skillful at it.

Those in preadolescence are becoming dependent upon the peer group, vacillate in attitude toward adults, and tend to be sex-role conscious.

Adolescents tend to reorient to the future and to present a sharp division between the ins and the outs.

What the teacher confronts, then, is a rapidly changing admixture of children in different stages of development.

The most important characteristics, then, of teachers for the middle school must be flexibility and a capacity for working creatively in situations which call for subgroupings and adjustment to differences.

The young people usually want a secure situation but like to show their disdain of childishness.

Beyond this, good teachers for the middle school must have the characteristics which research indicates are good in all teachers. Unfortunately, research on teacher characteristics has tended to turn up few variables which have objectively demonstrated effect. Among the very few which have emerged clearly are:

> Stimulating quality--an ability to create an atmosphere of excitement around learning. This often shows as an ability to provide task-relevant variety in what goes on in the classroom.
>
> Skill in structuring, in providing a situation where the expectations are relatively unambiguous. This seems to emerge as an ability to plan.
>
> An attitude of understanding, which the children see as the teacher being fair and patient.

What emerges as a combination is a teacher who like children and enjoys seeing them learn, whose expectations are definite and reasonable, and who focusses with the children on the tasks which seem germane to their future.

It should be recorded that many of the factors linked to differences in teaching method about which our colleges and schools of education have been excited in the past--teacher-centered versus student-centered classrooms, specific methods--have tended to be washed out by research as having much less effect than had been expected.

What appears needed now is a period in which we can get to the basic matter of finding ways to help children in various difficult stages of development to have experiences which build in them strong positive self-concepts, and attitudes which internalize the locus of control. This means that we have to gear both the teaching situation and the social life of the school to flexibility of approach.

There are two variables which are emerging from research which are tangential to today's topic but should be mentioned:

> Size of school has a demonstrably marked effect. For elementary schools the optimum size appears to be 300; for secondary schools, a graduating class of 250. The middle school movement, to the extent it calls for new buildings, may give us a chance to undo the damage of an earlier period which considered large size a good thing. But small size provides less possibility for a high degree of subject matter specialization among teachers. If this trend appears we may have to think once again of preparing teachers to be generalists who are skillful in utilizing the many new possibilities of auto-instructional devices, data-recovery, etc. This would call for a wholesale revision of teacher preparation.
>
> Good results are being obtained with the introduction into classrooms of various types of aides, ranging from the so-called paraprofessional adults to the use of students to teach students. These results offer some possibility of getting the flexibility earlier outlined. The standard classroom of one teacher and 20 or more learners may give way to various types of arrangements in which a team working under the leadership of a teacher deals with young people in a shifting pattern of subgroupings. This calls for a teacher who is a manager and director as well as an instructor. Our schools of education will have difficulty with preparation for this because the faculties are usually wedded to the instructional star system.

Let us put it this way in summary. If we are to have middle schools let us attempt to make this a real change rather than another movement which distracts educators from their main business. This means creative reaction to the needs of children and a break with the traditions which so often have thwarted previous innovations.

SYMPOSIUM

Participants: Dr. Samuel Popper, Professor of Educational Administration, University of Minnesota, Minneapolis, Minnesota
Dr. William Wattenberg, Professor of Educational Psychology, Wayne State University, Detroit, Michigan
Mr. Roy Isacksen, Principal, Como Park Junior High School, St. Paul, Minnesota
Dr. Bruce Howell, Principal, Community Middle School, Eagle Grove, Iowa
Mr. James Claypool, Principal, L. E. Berger Middle School, West Fargo, North Dakota
Dr. Clifford Hooker, moderator

ROY ISACKSEN: I think both Dr. Popper and Dr. Wattenberg did a superb job of making a case for the early adolescent being a special kind of person. When they hit the seventh grade, boys and girls start looking at each other in a little different way. I am reminded of the seventh grade boy before homeroom period who was wrestling with his buddy, as seventh graders will do. A cute little seventh grade girl went by and he stopped his play and said to his buddy, "When I stop hating girls, she's the one I'll stop hating first."

Seriously, though, our small group this morning began to look at some of the things that were said in Dr. Popper's presentation. He said that the junior high school ought to be a mediating force protecting the junior high school boy and girl from the environment. He also spoke of granting them a psycho-social moratorium. How does this affect us in our day-to-day contact with kids, how do we set up our program? I know your book is about this, but just give us a clue.

SAMUEL POPPER: I'd be glad to, Roy. But first let me make one thing clear. I hope no one hears me saying that I have some evangelistic mission to protect the traditional structure of the American middle school, that is, grades seven, eight, and nine. My professional interest is the sociology of school organization, which means that I am interested in structure and process of the total school organization, not just the middle school. For me, the study of the middle school is a theoretical problem. I ask myself how is it possible for an organization to be afflicted with all the illnesses an organization can possibly show and still be alive. Not only is it alive, but there are more of these schools today than there were ten years ago, and they're still more prolific. The sort of thing you find in the literature is that the junior high school exists to satisfy "the needs of the early adolescent." Well, this is mickey-mouse. Early adolescents have needs; all of us have needs.

So I had to perform a structural-functional analysis of this unit of school organization in order to get the answer. And I share it with you in the middle school book.

You have to begin by asking what is the goal of this organization? Now, what I gave this morning was a definition of the goal as I formulated it after three years of study, research and writing on this

problem. And what I'm saying is that this unit of school organization in a sense represents a kind of legitimized deviance in school organization. Because in school organization as in society youngsters are expected to perform, to learn patterns of skills; they are not there to play. And the less affectivity you have in formal organizations the better. But in this unit of school organization, the value principles are reversed. We say that the dominant focus is on the youngster as a human being, because he has these problems at this time of life. Therefore, we give him a psychosocial moratorium.

BRUCE HOWELL: To me the middle school is a vehicle for change, an opportunity for change. I got the impression this morning that you are extolling the idea of the seventh, eighth, and ninth grade per se. Would you comment a little on this?

SAMUEL POPPER: I'm not extolling anything. If someone were to come along and show me that as a result of empirical research by physiologists that early adolescent onset is at age four, I'd say begin early adolescent education at age four. Because if this school is for early adolescent education, then whenever medical scientists, the physiologists tell us that early adolescence begins for a large segment of the population, that is when you have early adolescent education. So far, no such evidence is available, so I'm saying that there is no institutional warrant for beginning early adolescent education before the seventh grade. I'm completely objective on this. I'm merely reporting the research evidence as I find it.

WILLIAM WATTENBERG: I'd like to make two quick comments. One is that I think our main concern psychologically is the evidence that apparently in a number of lives the period of puberty can be and often is a turning point. I think we ought to have the means available so that we can be on hand to help in the turning, if possible. This is the issue of the timing.

I think our second concern is that people's behavior is a response to the situation in which they find themselves. That the real heart of school administration is to get those modifications in the situation which in the long run enable people to work out in their own ways desirable improvement. We know two things. One is that almost any change, just the mere fact of change, makes people more interested in what they're doing, makes them think more about it, and results in an improvement in the relationships. Anytime you get a group interested in what they're doing and observing each other, and thinking about each other, and talking to each other about their jobs, there is a gain. But beyond this it seems to me that the average school is a very intense social system. If you have a school that is prepared and has the facilities for engaging in the kind of task we have been talking about here, it's more likely to do it than a school differently organized.

For example, if you have an elementary school with a seventh and eighth grade attached, the other teachers are likely to look on the seventh and eighth grade teachers as freaks who are somewhat incompetent because they can't manage the kids they had no trouble with last year. This is exactly what happens. Now, you talk about a moratorium, but if I had a pupil last year and he was responding beautifully to all the

pressure I put on him and yet you're having trouble with him this year and not putting any pressure on. I know the answer to the question -- put pressure on him like I did last year. I don't know anything worse for a seventh grade teacher than to talk to the teacher who had a student in sixth grade last year and didn't have any trouble with him.

On the other hand, when you get into the high school, where the teachers are teaching tenth, eleventh, and twelfth grades after the dropouts have dropped out, and have got themselves organized neatly around their disciplines, they also are likely to generate an atmosphere that tends to squeeze out the possibility of the flexible type of interaction that we are talking about.

So it seems perfectly clear to me that the job is to create somewhere in this block of time a unit which can function, in which the majority of pupils are confronting the same problem. They have a principal and a staff who will help them, and who reinforce each other in the way they react to the youngsters. In ordinary commonplace language, we need an institution in which teachers wrestling with the problems of the early adolescents are the majority group, and not a freak minority.

QUESTION: Referring to the fact that at age 13 half of the girls are physically mature, it has been said that in the midst of finding out <u>who</u> they are, students should not be troubled by trying to find out <u>where</u> they are. If we wait to move students until the time at which they are becoming physically mature, then both of these changes are taking place at the same time. Isn't there the possibility that if we made the move earlier, we then would be better prepared to deal with their "turning point" at the time it comes? Furthermore, will we ever get to the point where we begin to talk about moving children from one level to another when they as <u>individuals</u> seem ready for it, rather than always talking about groups?

WILLIAM WATTENBERG: It's a matter of history in school administration that quite a few years ago the Winnetka School System did in fact run its elementary school up to the eighth grade but began junior high school at the sixth. And that for a brief period the teachers did, in fact, change the youngsters when they felt that the quality of their social relationship had become different. I think that Margaret Mead has a point saying that you should make it possible to have some overlap in the school system so that the counselors and the people who know youngsters can in fact make this kind of decision. An overlap program makes, in my mind, some sense.

SAMUEL POPPER: The best possible of all worlds, as far as I'm concerned, will come when we finally, once and for all, rid ourselves of this obnoxious and completely useless grading system that we picked up after the civil war from the Prussians. It has absolutely no value whatsoever, and is grossly dysfunctional to our public school organization. So the best thing we can do for early adolescent education, at least, is to do away with gradedness in this unit of school organization.

QUESTION: I think your emphasis is mainly geared to physical development. What evidence do we have that they are maturing earlier in their mental development, and how does this relate to curriculum?

WILLIAM WATTENBERG: I thought I spoke of this. We have evidence that says in terms of what kids know, they're ahead of where they were a generation ago by a sizable amount. A point has to be made here about a very special ingredient called "locus of control;" how does a person see his life? Is he in the midst of accidents that happen to him beyond his control, or is he making something happen in the world around him?

I don't see that what we're saying indicates that now you forget curriculum. I think that what we do is recognize during a crucial period in their life history, youngsters may have a greater interest in certain types of problems, lesser in others. It's important for them to see that the teachers know this and care about it.

LEARNING THROUGH DISCOVERY IN FIFTH GRADE

by

R. E. Myers

I've had kind of a checkered career; and last year I went back to the classroom after four years in college and university teaching. I went back to find out if I knew what I was talking about. The first day was a terrific shock, the first week was traumatic, and I barely survived the year. Maybe if I hadn't taught the four years in college previous to that I would have done better. I wasn't so sure after that first day if I really knew what I was talking about. All the things I believed in very deeply seemed not to be working. For a while I lost sight of the fact that when you look at any group of youngsters, you must take into account their backgrounds, their abilities, and the kinds of teachers they had before you came along. The kinds of teachers that my pupils had had before I came along were evidently quite a bit different than I was. The tolerance my pupils had for me at first wasn't great, the tolerance of the other teachers for me in the school wasn't great; especially since I did the inservice with two other people just before we started the year. I'd gotten up like this and told them all what to do. And they just couldn't wait to knock me down to size when I got in that classroom. The tolerance of the parents for me wasn't great either. And my tolerance for the kids wasn't great. We had a lot of intolerance going on. But the kind of pupils I wanted to develop in that classroom were ... kids who were observant, who were flexible in their thinking, who were sensitive to problems, who were able to synthesize ideas and elements in an original way, who were analytical and critical in their judgment, who were able to elaborate on others' ideas, who were experimental in their approach, who were independent in their judgment. Those are just a few of the characteristics I was trying to develop in my pupils. This was a fifth grade class, and this also was a self-contained classroom.

It might be well to take a look at what my program was last year in social studies. We were proceeding methodically and lethargically along with the textbook for two or three months, reading from the beginning of the book to the end. It makes sense because it was history and so you start at the beginning and go to the end. Some radical teachers off and on through the years have started at the end and gone to the beginning; other teachers start in the middle and go both ways -- sometimes I do that. This time I was going to be traditional because I was in a fairly traditional school, so I started at the beginning of the textbook.

The book's approach couldn't be called the discovery approach to history or geography, or social studies, or anything else, I think. You could discover what was in the authors' minds - the two authors had a very logical arrangement for this - a very carefully ordered plan. However, I thought this wasn't a very successful program; maybe I was prejudiced. So I had been all along talking to the youngsters about the world, about the world they're living in.

There wasn't a day that passed that something wasn't said in the newspaper about aid and water pollution. Another thing that we were concerned about was racial strife. We were also concerned about taxation. That sounds like a sophisticated subject to be concerned about; but the kids were concerned about taxation. I thought the kids were getting pretty interested in some of these topics that would impinge upon their conscience more and more as they would grow older. Growing out of this one day was something that kind of surprised me. A youngster said he would like to write a book about how he was going to reply to some of these questions about racial strife, pollution, and so forth. So he and some others began writing the book.

I kind of seized upon this one day and said, "Well, if you don't like living around here, where would you like to live?" I said hypothetically you could pick any place you want in the world and go there --emigrate. You can go someplace and try to start your own colony or your own community. Pick anyplace in the world. So we started what turned out to be a long drawn-out process, a long unit of study. We called it "Pioneering 1967."

I was trying to get them to see some relationships that they might not have seen if we had just gone to the textbook and dealt with that alone. I felt that they could see some relationships with the culture in which they find themselves to other cultures; I thought they could see the importance of geography and even the importance of history. I thought they could see all kinds of connections with economics, sociology, and so forth. What they got out of it might have been something else. They might have been more concerned, as youngsters usually are, with getting it down on paper and the drudgery of it. But some of the things they did were very worthwhile. They wrote away. One group of kids wanted to go to a national forest area which was only 40 miles away from where we were, so they wrote for a contour map from the forestry department. Another group of youngsters wanted to go to Hawaii and they found an uninhabited island among the Hawaiian Islands, but they couldn't figure out why it was uninhabited. It just looked like a terrific place -- the climate, the idyllic life of living on an island, and so forth. This very much appealed to these girls -- they happened to be all girls, interestingly enough. And then they found out why this island was uninhabited -- you may not know, and I certainly did not know at that time why it was uninhabited -- it's used as a bombardment base for the United States Navy.

I don't always organize things in units of study; I frequently drill in various things. I don't think there's anything that rules out the basic number facts being drilled. I think that that's still quite legitimate, even in an approach such as Bruner has.

I often do a lot of other things. As I said, I like to have youngsters become observers. This seems to me the basis of understanding: to be alert, to be sensitive, to be aware. But you don't really find youngsters being terribly observant. So for some reason or other I always start there, with kind of a perceptual approach. I give little exercises like this, and I'd like to have you respond yourself. Not because you're in the position of a fifth grader, but these are things that fascinate me. And I find that some of the things that fascinate me also fascinate the kids. And pretty soon after we get rid of me then I find out what fascinates the kids and we can go on that. But we usually start with me because, as you know, the teacher is the guide.

I'd like to know if ants move more slowly in hot weather, or cool weather, or warm weather. What do you think? Have you observed ants? Do birds start chirping before dawn, at dawn, or just after dawn? Now this morning it was misty, rainy. Does this change the way things sound? It definitely does, doesn't it? Oftentimes when I give them questions like this we go into a whole unit of study, because we get fascinated by it.

Another thing I like to do is have youngsters flexible in their thinking. You see, I'm proceeding on the assumption that the teacher can make a difference in the youngsters' lives. It's a very chancey kind of assumption, I admit, but just one thing that you can do sometimes can make a difference in the kid's life.

So I give them this little redefinition exercise. This is a little difficult at first because it deals with paradoxes and you might think that youngsters couldn't handle it, but they do pretty well. The first paradox I'd like to throw at you is this: how could someone be morbidly cheerful? This has to do with the reconciliation of <u>opposites</u>. Who could be quietly blatant? How could someone be silently cheering? How could something be dark with brightness? Can someone be naturally false? How about a moronic genius? What might be an obscure revelation? I call this an exercise in redefinition, but you could call it almost anything you like. It calls for flexibility in thinking.

And I also like them to be more sensitive to problems. In order to help kids become better synthesizers of information and ideas, I give them little exercises like this: "What if you were a night watchman in a warehouse, and you didn't have anything to do? Then you discover a couple of boxes of junk, and in these boxes are all kinds of things." I give them a long list of all the

things that they find in this box, and ask them what they could make by putting the things together. According to the theorists, this is what an original person can do. He can take elements that are found around him, and put them together in an original way.

Another thing I like to have youngsters be is analytical in their thinking. So I throw little problems at them. Little things that puzzle me. Have you ever taken a look at your ears, and wondered why they're there and why they're shaped as they are? Of course, you know the function of the ear, but you begin thinking about what a very peculiar animal a human being is if you look at him very long. Have you ever done that? No? Well, I guess I'm the only really odd one here.

Still another thing I do is ask the kids to be analytical in their thinking about ideas. A little bit skeptical. I want them to look at the different elements in a statement and find out what the crucial elements are. If a speaker makes a flat statement, find out what his evidence is. I throw up old proverbs such as "practice makes perfect." We have some of these contradictory sayings like "Look before you leap" and "He who hesitates is lost." Are they really true?

I have been doing a little survey for the past six years in seeing how children perceive teachers; and one of the things that came out of this is that they want very much for the teachers to admit their mistakes. Another thing they want very much is for the teacher to trust them.

The kind of teacher that children want most of all is one who will be interested in them. Nowadays this means the type of teacher who will discover life along with his pupils -- a co-experiencer. Perhaps the teacher who is in love with his pupils and in love with learning is the one who will make the difference. He can help prepare children for the bewildering and exciting world they face by giving them the intellectual tools with which they can attack and solve the very difficult problems they have inherited from us.

TEACHING THINKING ON THE SYNTHESIS LEVEL

Burton L. Grover
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This paper represents one tentative step of one part of an overall curriculum development program. The general program is being undertaken by the Cooperative Curriculum Development Center (CCDC). The CCDC is located in east central Wisconsin, it is partly financed under Title III of the Elementary and Secondary Education Act, and its Project Director is Dr. Norris Sanders. The curricular rationale of the CCDC defines seven kinds of thinking, of which synthesis is one.* Synthesis is defined as that thought which takes different elements and combines them to form a novel and original product. As such, it is similar or identical to creative thinking, and a curricular program for synthesis can draw upon much of the research on creative thinking.

By definition, much of that thinking which leads to creative outcome is that which is classified as synthesis in our rationale. It is the purpose of this paper to outline a program designed to make pupils more able and more likely to engage in thinking on the synthesis level. The assumption -- or hope -- is that the likelihood of a pupil becoming more creative as a consequence is great enough to justify the efforts in implementing such a program.

To claim that all varieties of creative thought and endeavors would be identified, captured, classified, and taught by such a program would be presumptuous to say the least. That claim should not be necessary, however, to start a synthesis program. Even if the program is arbitrary in its classification and selection of behavior associated with synthesis, it should help rather than hinder creative development. Without a planned, systematic program, it is too easy to give no more than lip service to the ideals of creative development and synthesis objectives.

The basic idea of the program is to embed synthesis-type activities throughout the curriculum in some planned manner. The activities would be embedded in all grade levels and most courses of study. There would rarely be a synthesis "unit" distinct from those units identifiable by subject matter topic and field.

The embedding of activities occurs after taking that which is associated with synthesis and breaking it down into several parts. These two fall into two categories distinguished by their objectives: one

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*This part of the CCDC's rationale is based upon the cognitive Taxonomy of Educational Objectives by Benjamin S. Bloom and associates and Norris Sanders" "Taxonomy of Questions."

is to teach the pupil understandings and attitudes about the creative process itself, and the other is to provide practice in certain specific behaviors which are associated with creativeness or synthesis.

Some of those activities which are designed to give practice in synthesis are grouped into certain sequences. To a certain extent, the sequences are distinguishable by complexity of thought required, but mostly they just seem to fall into groups because of interrelationships of the parts. To repeat, this classification of elements is rather arbitrary, but better an arbitrary classification than none at all, for a classification is a prerequisite of a systematic program.

Such a program in its final form (it is by no means in a final form yet) would give both sequences of synthesis activities and grade and subject placement of these activities. It should be recognized that some parts of the program are more fundamental than others, and the more fundamental parts are less specific in their recommendations. The more specific and less fundamental parts of the program, like grade placement, are more subject to change because of whim and fancy.

There are probably those who are skeptical and distrustful of any systematic program for synthesis, because of the unfettered nature of the type of thought involved. Of utmost importance, they would claim, is to have a general attitude throughout the faculty that recognizes and values creative endeavors and provides the condition of freedom necessary to such endeavors. We do not dispute the claim nor attempt to argue the relative merits of a program versus a general attitude. The assertion is made, however, that a general attitude is not enough; a program is needed because synthesis can be all too easily ignored without it and because some of the elements are sequential and need planned curricular provisions.

SYMPOSIUM

Participants: Mr. Alfred Held, Principal, Jefferson School, Racine, Wisconsin
Mr. Warren Nelson, Principal, Orono Middle School, Long Lake, Minnesota
Mr. Harry Vakos, Director of Secondary Education, Minneapolis Public Schools, Minneapolis, Minnesota
Mr. Rod Myers, Teacher, Eugene Public Schools, Eugene, Oregon
Dr. Burton Grover, Research Assistant, Cooperative Curriculum Development Center, Manitowoc, Wisconsin
Dr. Clifford Hooker, moderator

WARREN NELSON: Rod, you present a paradox to me in that you seem to prefer the self-contained classroom; yet you say you like to see kids exposed to various types of teachers. I wonder how you resolve this paradox?

ROD MYERS: I think some teachers are disposed to work more effectively in team teaching than others. I'm not sure which category I fall in, but I think I'm more comfortable with a self-contained classroom in my own free-swinging way. We are doing team teaching of a sort at the University of Victoria. I'm the kind of unit leader, and there are three other teachers who work with me. I see some big advantages in team teaching where the teachers can work together and learn from each other tremendously. If I had my own school, I would probably have a combination of both.

HARRY VAKOS: Rod, you mentioned sometime this morning that you should look at each student at least once a week and see whether or not he feels better about himself. Some of us are wondering whether or not you also look at, say, geography to see whether or not you've done what are supposedly the goals of seventh grade geography.

ROD MYERS: I see an implication here that we could have a lot of fun in my class, and not learn a whale of a lot and not help the kids get through school. It's surprising, but I haven't been accused of that yet by anybody. I take a pretty close look at the work as we go along: language skills, mathematics skills, social studies skills. You know, back in the 50's they had this big kick about relating the curriculum to the needs of the youngster. Well, I'm still on that kick.

HARRY VAKOS: Do you need a better teacher to be a creative teacher?

ROD MYERS: There is a big difference between being creative yourself and in getting kids to be creative. This distinction is not made often enough. You read in the literature about the creative teacher as though the creative teacher perforce inspires others to be creative.

It isn't so. A teacher might be stodgy, uninspired, bland, and still be able to get the kids to develop some real dreativity. It's possible because they are two different things.

ALFRED HELD: I have a question for Dr. Grover. How does one go about getting a staff interested in using different levels of classroom questions?

BURTON GROVER: Some of us have spoken to groups of teachers and given examples of the kinds of questions we are talking about. These examples have a certain amount of inherent appeal that the teachers can pick out and use. The more examples that are presented, the more teachers tend to use these examples or get started in making up their own.

ALFRED HELD: Are all children capable of thinking at the synthesis level?

BURTON GROVER: I'm not aware of any research evidence that says they are. But I believe that the answer is yes. We feel that it is possible to ask easy questions on all levels. For example, you may show a picture of an animal -- say a platypus -- and ask, "What questions can you think of about this animal?" It seems to me that this is the type of question that even low I.Q. people can respond to.

WARREN NELSON: You mentioned, Rod, that you are not dependent on the textbook; that you don't have to stand in front of the classroom. And you said that you don't have to be all-knowing and that you aren't particularly concerned about your class being quiet. Now these things furnish many teachers with security. What's your security?

ROD MYERS: Well, I can give you a very pat answer. I want to see whether the kids are interested in learning. I wouldn't want my class to be noisy all day; I wouldn't rule out the use of textbooks part of the time. But the only security that I have is seeing that they are eager to learn.

WHAT A MIDDLE SCHOOL MIGHT BE LIKE

William Alexander
University of Florida

We need to give serious consideration to the question of what a middle school might be like. Else we might find that we have renamed the school without doing very much about changing its program.

I think there is increasing concern in many of our communities about the schooling we provide for this level of human growth and development. It is the "tween-ager," not the teen-ager, we are thinking about. It is this person who is not quite a child and not yet quite a youth.

As I see it, education in the years that we think of as elementary and secondary ought to be a continuous process. We have always given lip service to this, though we have broken it very abruptly between the elementary and the secondary school. But in this continuous process of education there are obviously different phases of growth and development to be served. Clearly distinct is the childhood phase. Clearly distinct is the adolescent phase. And in between these two phases is the tween-ager -- the youngster in the middle school years.

The exact grades or ages to be included in this phase is an issue to be settled in terms of particular communities and particular educational programs. My only assumption is that there ought to be a program for the in-between years which is uniquely planned for them. It ought to be a program which has more challenge and specialization than the program characteristically provided in the upper grades of the elementary school, and it ought to have less regimentation than is characteristic of the usual junior high school and high school. It ought to have more individualized education than we have had in either the elementary or the secondary school.

As to what it might be like, then, on the negative side, it might be too much like a junior high school or an elementary school. And especially the former. Because undoubtedly in certain communities we are simply changing the name, moving a grade down, and keeping the junior high school organization as it has been.

Now, I realize full well that solving a building problem, solving a social problem, solving a population problem may be a way into a better program for children. But I would hope as you work in your communities to develop a program, no matter what the original rationale may have been, that you develop a rationale about the kind of program you are to have. And that it will be a more satisfactory program for the middle school years than many have had traditionally.

Now we will look forward to what the middle school might be like. I would assume first of all that each middle school should have its own program; that we would not talk about a standard pattern for all

middle schools, though I know our tendency is to move toward standardization. Certainly if we are concerned with the heterogeneity of this between-age school population and with developing a pattern that meets it, that pattern is likely to be somewhat unique itself. And of course you know that the program of your school is inevitably affected by the competencies and interests of the faculty, and by the kind of physical facilities you can devote to that school.

However, there is a necessity for having a plan in each community that fits the total program of education in that community. Now I would like to think of the middle school in particular (and this might be valid for the school program as a whole) as having a total program of learning opportunities for boys and girls that would have three points of focus:

1. the personal development of the learner
2. the development of his skills as a learner
3. the more traditional curriculum content of organized knowledge.

As to providing for personal development, there is first of all the means for each youngster to have some one member of the faculty who is responsible for guiding him through the entire school program. This would be the teacher of a home base group. Not a homeroom group; we aren't talking about a room that meets for nine minutes a day for administrative purposes only. We are talking about one teacher and a group of children as small as your budget will permit, probably twenty-five.

A second matter of great importance in the area of personal development is values. Third, we would place a high premium on physical education. Certainly emphasis is needed not only on the development of physical skills, but on the wide variety of physical activities in which they are used. As much as such activities, there is a definite need for health education that gives emphasis to the health requirements of this between-ager and his growing body, to the development of the human reproductive system.

Perhaps most important in the personal development area is the development of individual interests. Here is the first opportunity for most children to experience the exploration of activities or interests outside the elementary school program of studies and outside what their home and community provide. These would be in art, dance, drama, foreign language, industrial arts, journalism, music, typing, and others that are provided in an increasing number of junior high schools. These activities would be offered during an activity period, so that they were available to all.

Let's turn to the second category -- the skills of continued learning. I think of such fundamental skills as reading, listening, asking questions, interviewing, viewing films and TV, and all the other things that we do in observing phenomena in the environment; generalizing from observation, evaluating information and opinion. These are skills that cannot be left to chance in the middle school. I see, too, the introduction of independent study, a study which is independent of an organized class.

The third area of the program is organized knowledge. We are not going to rule this out in the middle school, but I would hope the program we provide would be selective. It would be closely articulated with the program of the elementary and secondary schools.

I see the instruction in language arts, social studies, science, and mathematics as being done on any of several bases. Hopefully it would be on a team teaching plan. I see four teachers working with their four homebase groups. Their other responsibility would be as a member of a team with a particular specialization in one of these four subjects. This means one homebase teacher with a specialty in language arts, one in social studies, one in science, and one in math. These four teachers would comprise a team for instruction of one large group of 100-200 students. I think this may be the best possibility, providing for some specialization and yet for a close relationship among teachers and pupils in a flexible schedule. Maybe you cannot work this out, but if it could be arranged, I think we could combine the intimacy of the self-contained classroom with the competence of the departmentalized secondary school teacher.

I would suggest to you that as you move along with your plan, you keep three questions before you: 1. Does the new plan really have fewer harsh breaks and greater continuity than we have under the elementary-junior-senior high school plan? 2. Does the new middle school provide better for the wide range of individual differences than did the same years in the elementary and junior high school? 3. Are desirable innovations in organization and resources introduced more fully and more effectively in the new than in the old organization? We have to keep these questions before us as we move into the new pattern, if we expect to have a better school as a result.

SYMPOSIUM

Participants: Dr. William Alexander, Professor of Education, University of Florida, Gainesville, Florida
Dr. Richard Brooks, Consultant in Planning and Development, Iowa State Department, DesMoines, Iowa
Mr. Jack Riegle, Principal, Chippewa Middle School, Saginaw, Michigan
Miss Charlotte Lehman, Principal, Portland Junior High, Bloomington, Minnesota
Mr. Robert Johnston, Principal, Golden Valley Middle School, Golden Valley, Minnesota
Mr. Ronald Brandt, UMREL, moderator

JACK RIEGLE: The comment I would like to make is that simply changing the name or the grade arrangement of a school doesn't mean anything. You should be looking at the program. In my travels, I have seen very few schools where the program was designed to be what the kids need. There are quite a few that are calling themselves "middle schools" where the curriculum is designed to be what the subject matter demands.

RON BRANDT: Well, do you think the middle school will be able to be any different? And how is it going to do it?

JACK RIEGLE: I think it will be if people have the courage needed, and if they aren't afraid to be fired. I was fired once, and I'll probably be fired again.

WILLIAM ALEXANDER: I want to turn back if I may to a question I have heard quite a bit around the corners here. And that has to do with, "Well, why can't the junior high school be the middle school?" Now, I'm quite sure that junior high school was developed to provide the transition from elementary school to high school, and I'm quite sure that the junior high school has made a tremendous contribution to American education, but at the same time, unless your junior high school is atypical, it follows a program of studies that fundamentally is dictated by the high school. It has a schedule which is relatively inflexible. It has a recording, marking, and evaluative system which is dictated by the Carnegie unit. It has taken on a sophistication in its athletic program and in its social activities program that is more suitable to the upper years of adolescence than to the years of pre-adolescence. If you can make your junior high school really a school with a program for the tween-age years, I don't care what you call it. But let's not fool ourselves. It can't be the traditional and typical junior high school program in this country, and really meet the needs of the great variety of youngsters who enter our schools during this transition from childhood to adolescence. I guess I'm supporting what you said. I don't think you can just change the name and keep the program. That is not what we want.

QUESTION: [illegible]t what we are looking for a continuous program of education without the sharp breaks between the different levels that we now have?

WILLIAM ALEXANDER: In one of the groups this morning, we were saying that the really desirable program of education would be a total program from school entrance to school exit. I wish we could see ways of getting our levels of education more interchangeable, with personnel moving back and forth from elementary to high school to middle school; with people who are real leaders being able to teach at any level of the school system; where children might move from one school to another more freely. I think this is really the idea behind the educational parks that are being constructed in some of our urban centers.

You know, you people from the small towns have got your educational parks already. Your schools are right close together. Unfortunately, most such communities have continued to develop an elementary education program, and a secondary education program - divided right down the middle.

QUESTION: You talked about your oldest boy going to junior high school and being exposed to seven different teachers all of a sudden. Aren't you saying that this is what would happen in the middle school at even a younger age?

WILLIAM ALEXANDER: I think that there is a very different basis of it. He may still be working with six or seven people, but he won't be on a rotation schedule such as you have in the junior high school. As I see it, for example, a fifth grader coming in for a full year of school might very well operate on what is essentially a self-contained basis for the first month or two of school. The team would decide when they are ready to introduce specialization. I think it is the flexibility here that makes the difference.

QUESTION: Would you care to comment on the role of the teacher training institution in preparing middle school teachers?

WILLIAM ALEXANDER: We have never had a program for training junior high school teachers. We have had some starts in this direction; we have a program of certification of junior high school teachers in some states, but basically in this country we have had a program of elementary teacher education and secondary teacher education, with very little provision for the in-between group. This means that as you move into the middle school pattern of organization the influence will have to be on the teacher preparation institutions to prepare a teacher who is qualified for teaching at this level. I guess the problem for all of us is to become inventive in developing new types of programs while we're utilizing those good teachers we now have in elementary and junior high school. I do say that you cannot wait for the teacher education institutions.

DR. R. K. WOODS (from the audience): We know, relative to the preparation of teachers, that at the secondary level there will be eight teachers prepared for about every five available positions. At the elementary level the situation is just the reverse: there will be about five teachers prepared for every eight openings. Consequently there will be a tendency for administrators to place secondary-prepared persons in the elementary schools. This will tend to make the elementary school a departmentalized school, and will also tend to accelerate movement toward a 4-4-4 program.

WILLIAM ALEXANDER: I know one large urban school system in the South that, as of the last time I was there, had not employed in several years a single teacher above the fourth grade who was prepared to be an elementary teacher. Teacher education is not going to change fast enough. I think you must develop your own training programs. I heard this morning about a wonderful example of a re-training program for team teaching in Racine, Wisconsin. I hope you're going to hear more about that in this conference.

ESTABLISHING OBJECTIVES FOR INDIVIDUALIZED INSTRUCTION

John Downs, Principal
Duluth, Minnesota

The individualized instruction program in Duluth started three years ago at the Congdon Park School in grades five and six. Today we have six elementary schools that are involved in the program, three junior high schools and two senior high schools all of which have pockets of individualized instruction being developed to some degree or another. All the mentioned programs have been relatively successful.

Duluth is not the only city in which there is interest in developing programs of individualized instruction. Similar programs are being tried at the American Institute of Research in Palo Alto, California; the Oak Leaf School in Pittsburgh (Pittsburgh has what is called the IPI plan: individually prescribed instruction); and the Nova school in Florida. IPI, AIR, Nova, and Duluth all use behavoral objectives as the heart of their programs.

> (Mr. Downs showed a tape-slide presentation prepared by Mr. Thorwald Esbensen, Assistant Superintendent of Instruction for the Duluth Schools, which explained how instruction may be individualized by basing it upon a series of carefully established objectives stated in behavioral terms.)

In the upper grades they do not bother with class schedules as such. At the Nettleton School there are 180 students in grades four through six. Each room area is called a lab (language arts lab, social studies lab, science lab, etc.). After homeroom, students go to any lab, stay there as long as they want to, and then go to another lab for a different discipline. The student is responsible for much of the decision-making in terms of what he is going to do with his time. Of course, each student does have assignments in each subject matter area which are due at given times.

In order to decide what work the students should do, diagnostic tests were given. From these tests the teachers were able to determine which objective a child should be assigned in a given discipline. Children are not expected to complete all objectives at any given grade level, but are expected to progress at their own rate as fast as they can or as slowly as they must.

It is important to point out that parents of children in these projects, and the children themselves, generally like this approach better than the traditional program.

TEAM TEACHING IN THE BLOCK-TIME CLASS

by

Lloyd Johansen
Title III Director
Racine, Wisconsin

I wouldn't think of speaking to an audience like this one without telling you what my objectives are. I have three.

First of all, what I'm attempting to provide is a model for operation in a team teaching situation. My second objective is to show you how you might retrain your staff in order to operate in this kind of organization. My third objective is to emphasize the urgency of implementing such an organization for instruction in our schools.

Now the Title III project that we have had is two years old. Our first year's experience was a pilot program. This last summer, we had 115 professionals working in the program. They came not only from the Racine Unified District, but they came to us from southeast Wisconsin and from Michigan. The elementary and secondary teachers were from both public and parochial schools, and we had three college staff members. These people were just teachers this summer; they taught just as everyone else did.

We often talk in education about an ungraded program, about the dual-progress plan, self-contained classrooms, and grouping by ability or interest. Any one of these can be accomplished through the basic team structure. In other words, if you have well organized teams, you have the flexibility to do any of these things whenever the team decides they want to do it.

We've had self-contained classrooms in Racine for many years - as fine as self-contained classrooms anywhere. And we will have self-contained classrooms in many schools for many years to come. But what we are talking about this morning is our effort to convert our self-contained classrooms into a team structure. It takes time, and it is not yet going on in many of the schools in Racine. But we believe that team teaching holds the promise of providing the kind of instruction necessary for young people in the schools of today and tomorrow. So we put the emphasis on trying to organize more teams and preparing teachers to operate in these teams.

When I speak of the team, I am speaking of a sophisticated organization. We are dealing with an English and social studies team at the junior high school level primarily, and a team in all disciplines at the elementary level. What does a team consist of? In this case we're talking about six professional teachers, a team leader, and an intern working as a team member. The team includes a resource librarian. The resource librarian is not a person sitting in the library guarding the books.

It is just about impossible for a team to plan together and work effectively without being able to say what it is they're trying to do. If they know what their objectives are, what they're trying to accomplish, they can look at the learning experiences that are suggested and either use them or cast them aside. This is a basic function of a team.

Now let's look at how the team might work. It could be that you would want to group for a period of time by ability. We call this an inbred group. Groups which have worked together to investigate a common topic are another example of inbred groups. If we want to share ideas back and forth, we would take a couple of youngsters from each of the groups and put them into what we call hybrid groups. These are just a couple of examples of the ways groups can be formed. This kind of organization can go on in many different ways, so just let your imagination go. This is the purpose of a team.

Now in order to plan the lesson, we deal in modules within the block of time. There are two reasons for dividing the time into modules. One is for flexibility, and the other is for ease of communication. You know how inefficient it is to plan for the use of time without having convenient segments to refer to. In this case we simply talk about using modules two through six, for example.

One absolute essential for team teaching is time for planning. If you do not have time for team planning within the school day, then forget it. Many teams have disappeared because they do not have time for planning. The team which Mr. Olson is in charge of has 104 minutes every day for team planning, team preparation, and team evaluation plus student and parent conferences. They have 104 minutes of time in which to work with 200 eighth grade students in English and social studies. They have a second block of time in which they work with another 200 eighth grade students. In other words, at Starbuck Junior High School we have 400 eighth graders and these people service all 400 of them - half in the morning, half in the afternoon.

If the team is going to operate on a democratic basis, it is very inefficient. If you ask a group of colleagues, "What do you think of this?" you know what kind of response you can and should expect. We will have to assume that this is a slow task and consequently that some of the tasks that are related to planning and preparation should be done by an instructional secretary. This is absolutely necessary.

FLEXIBLE SCHEDULING FOR THE MIDDLE SCHOOL YEARS: THE FLUID BLOCK PLAN

by

Almon Hoye
Principal, Marshall Junior-Senior High School
Minneapolis, Minnesota

The fluid block plan used at Marshall High School in Minneapolis is really nothing new. It is a synthesis of many things. It includes the block of time, inter-relationship between subjects, non-graded teaching in spots, teams of teachers working together, grouping of students based on achievement and interest, and division of time into various patterns. In the fluid block, classes may be one hour long, a half hour long or three hours long. You can change from day to day, you can do whatever the teachers want. The classes may meet any number of days a week. They may change in size. They may group and regroup. And if that isn't flexibility, I don't know what is. These things are made possible by assigning a large group of students to several teachers in different subject areas and letting them plan together for the flexibility they want.

As we planned the program, some of the teachers were talking together and they came up with an idea for "activity Wednesdays." On Wednesdays all students will have three activities in blocks of about two hours each. Two of these will be subject-related, and the other may be fun-related, like "cooking for boys" or "bridge."

A modern innovative middle school should have a climate for inquiry which is provided by a principal who realizes tne creative potential of the teachers in his building. The program should be flexible, and this means that a flexible schedule of some sort should be used. The change should be based on a thoughtful analysis of the situation, instead of expediency. Don't jump on a bandwagon - but if you need change, go ahead.

And having introduced a new schedule, and having initiated a learning resources center, and having introduced team teaching into your building, what do you have if you don't have change in the teaching situation? You have nothing. The important thing should be: will the change be superficial or significant?

We are trying to learn. We do not know the answers; we're seeking the answers. And when we find them, we will have new problems and new questions, so we never finish. It's fun, and it's exciting; and that's the beauty of it.

SYMPOSIUM

Participants: Dr. Rolland Callaway, Associate Professor of Education, University of Wisconsin - Milwaukee
Dr. Almon Hoye, Principal, Marshall Junior-Senior High School, Minneapolis, Minnesota
Mr. Lloyd Johansen, Title III Director, Racine, Wisc.
Mr. Ronald Olson, Team Leader, Starbuck Junior High School, Racine, Wisconsin
Dr. Wayne Worner, Assistant Superintendent, Grand Forks Public Schools, Grand Forks, North Dakota
Dr. Clifford Hooker, moderator

QUESTION: Dr. Hoye, could you explain exactly what your plan is in the fluid block which provides the possibilities you have been telling us about?

ALMON HOYE: Well, this morning I saw something very much like it in the team which Mr. Johansen and Mr. Olson described. But we're including more subjects.

QUESTION: But the program described this morning was one in which the team teaches the whole eighth grade -- they teach the same thing in the morning that they teach in the afternoon. Each teacher is a member of that one team only, and the team plans their work together. Your teachers will have to be members of several teams at once, won't they?

ALMON HOYE: Yes, they may be members of a couple of teams.

WAYNE WORNER: Most of the people in the conference have insisted that if team teaching is to succeed, time must be available for planning. Will there be this time available under your program?

ALMON HOYE: There has been a lot of planning in the past. It started informally. We had a couple of half days off last year, and then the teachers have been working through the summer. We have had the people involved in the teams working the types of schedules, resources, units they would be using, and so forth.

Starting next fall we do hope to have half day sessions occasionally. We have been assured that there will be money available so that the teachers can work on Saturdays. They also are scheduled to have their conference periods together -- the team people.

ROLLAND CALLAWAY: Mr. Johansen, I don't think you made clear what the rest of your program is at Starbuck. Your report seemed to deal only with the eighth grade English and social studies area. Are you teaming in other areas? And if not, why not?

LLOYD JOHANSEN: You have to make decisions as to what you want. And as an administrator it was my decision that I would like to have a highly organized sophisticated team operating preferably in two disciplines rather than having it in all of the disciplines and having people operating under conditions in which they could not succeed as a team.

Now, we have other teams in the building which are in operation, for instance, in science. It is not as highly organized as the English-Social Studies teams. When I talk of a team, I am thinking of a group of people who declare themselves to the interest of better quality of instruction and who have the time to do this.

I am concerned about Mr. Hoye's proposal in terms of whether the teams are really going to function at the level at which he'd like to have them function without the kind of preparation time they ought to have if they are to be members of two or three teams. I don't know.

ALMON HOYE: Well, actually we are talking about quite a bit of planning time. We're talking about a group of people dedicated to working together within a period of time to complete a job better than they were ever able to do before by themselves. And it's what <u>they</u> want to do. I feel that people who are dedicated to doing things have a much higher chance of doing them than if I tell them what they have to do.

ROLLAND CALLAWAY: It would appear that the teams in both cases that we're talking about are subject-centered. If so, do you leave correlation of subjects to chance?

RONALD OLSON: Well, we try to correlate as closely as possible. An example is where we might be studying the expansion of the United States in history. We might have a large group presentation in which we talk about American folk lore in literature during this period. We might ask the music department to present a lesson or two on American folk music.

ALMON HOYE: Teachers have volunteered to work on teams because they thought the curriculum was fragmented, and they wanted to plan together for relating their subjects.

CLIFFORD HOOKER: I believe it was Dr. Nielsen who yesterday was concerned that we talk so much about team planning without involving the students in the planning process. It seems to me that I have failed to hear today any reference to students being involved in the planning.

RONALD OLSON: They are, to a degree. I think the involvement of the student comes in the independent study. They find topics that they feel like investigating, and they go out on their own. We usually plan most of the instruction in the large group and the small groups, but they lead the small groups themselves, and the groups tend to take the direction they want. I think there is more student involvement than we are aware of, until we stop to think about it.

QUESTION: Sometimes it appears that you might be innovating without accomplishing much. Do you have any provision for evaluating what you are doing?

ALMON HOYE: In the Ramsey program I referred to, there was a very sophisticated statistical study involving using semantic differentiation to check concept of the subject, concept of the school, and achievement testing in the various areas. At Marshall we have already been discussing pre- and post-testing in terms of attitude and achievement.

LLOYD JOHANSEN: I'd like to respond to that. We are not going to get any significant test results until we really develop some test instruments which reflect our objectives. Let me be specific. Last year at the Goodland Elementary School in fifth grade, 125 students were working intensively on open housing in social studies. These youngsters talked with the man who wrote the open housing legislation for Wisconsin. In terms of social studies, they were probably achieving objectives that are very desirable, but if you look at the Metropolitan Achievement Test on social studies, there isn't a question that even relates to what those youngsters did for two weeks in that social studies unit. We must develop instruments which can come up with more significant information.

QUESTION: What about the attitude of the youngsters themselves toward this type of program? In other words, are there fewer discipline problems? Is there a better feeling toward school?

ALMON HOYE: This is one of the things we are trying to get at in our evaluation. Subjectively we feel that discipline has improved, but we would like to be able to show it more objectively.

RONALD OLSON: From the standpoint of the teacher, I do get feedback from students, and I think they are pretty honest at this age. The response we get from the students would indicate that they are very enthusiastic, they like the program, and they like the different activities. They like the feeling of independence it gives them. And the parents like it, because if the students are enthusiastic, parents are going to be satisfied.

QUESTION: What are the implications for teacher education? Where do we go now in teacher education if this is the kind of program you see as desirable for this age group?

ALMON HOYE: I would say that by and large we could throw out a lot of what we now call teacher education. Maybe the college students will have to come to the public schools who are trying these things and learn from them, because they certainly are not getting this at the colleges. Everything there is fragmented into bits and pieces. They bring the fragmented bits and pieces back to the high schools and try to teach little college classes.

All you have to do is to pick up a college bulletin and see that teachers take a course in English methods, or a certain aspect of English methods. There are very few courses in using interdisciplinary approaches or team approaches.

CLIFFORD HOOKER: Won't you have to agree that most of the teachers who will be meeting classes in the next ten or twenty years are already through their teacher preparation programs?

ALMON HOYE: Yes. So it will have to be inservice from now on.

CLIFFORD HOOKER: And whose responsibility is that?

ALMON HOYE: Well, if the creative forces in teacher education are at the college level, then it is about time people at the college level got involved in inservice education, at least at the leadership level.

LLOYD JOHANSEN: I would just like to mention, as I did this morning, that three heads of departments of teacher education were with us this summer in our retraining program. They have placed their recommendations in writing to their colleges as to what changes should be made in teacher education. I would be happy to send their documents to anyone requesting them.

PREPARING TEACHERS FOR THE MIDDLE SCHOOL YEARS

by

Emmett L. Williams
University of Florida

I have been almost totally involved for this past year directing an N.D.E.A. Institute at the University of Florida for the preparation of middle school teachers. When we began planning the program for our Institute, we asked ourselves the following kinds of questions:

> What is a middle school?
> What are the distinctive functions of a middle school?
> How does this group of functions make teaching in the middle school different from teaching at any other level?
> What kinds of teachers do we want for pupils in the middle schools?

We felt that our tentative answers to such questions as these would give us guidelines for a program to help build teacher competencies for success in the middle school. You have been working with similar questions all week -- I would like tonight to share with you some of our present answers -- and tomorrow there are plans for us to continue the discussion and you will help us as we look for new and better answers.

What is a Middle School?

Very simply, the middle school consists of the organizational and program arrangements for pupils who are no longer children and not quite adolescents. It is a school for the "in-between ager." As an organization, we are talking about a school for pupils ranging in age from 9 through 14, with ages 10 through 13 being most typical. Compared to the usual grade organizational pattern, we are talking about a school typically housing grades 5 - 8 or 6 - 8, although several age-grade patterns exist in practice.

What are the Functions of the Middle School?

The middle school shares many functions with elementary and secondary schools, but there are certain functions which require special emphasis at the middle school. A program appropriate for older children and pre-adolescents will provide curriculum opportunities and planned activities which serve such purposes as the following:

1. The program should be designed to help each pupil understand himself as a developing human individual. The program must prepare him to understand and accept his new role as a developing adolescent.

2. The middle school program should insure every pupil a degree of success in understanding underlying principles and key concepts of the organized disciplines.

3. Another important function of the middle school is to foster independent learning.

4. The middle school serves the important function of promoting maximum growth in basic communicational and computational skills.

5. We expect the middle school to permit wide exploration of personal interests.

6. Underlying all aspects of the middle school program is an emphasis on values.

7. Perhaps the single most important function of the middle school is to make learning exciting.

What Kind of Teacher Do We Want for the Middle School?

In attempting to answer our question of what kind of teacher we wanted for the middle school, we found that we had reached two very simple conclusions:

1. First, we concluded that every middle school child has a right to a teacher who knows the nature of older children and adolescents, and knows how to work with them in ways which lead to self-understanding, self-acceptance, and a positive sense of worth. In reality, it is the nature of the middle school student that differentiates teaching in the middle school from teaching at any other level of the school ladder. These pupils need the guidance and stimulation of teachers who see as their main goal the full development of the creative potential of every individual in the middle school.

2. Second, we concluded that every middle school pupil has a right to a teacher who knows enough about the subject area he teaches to be able to transmit the basic simplicity underlying all disciplines in such a manner as to create enthusiasm for learning on the part of students.

How Do We Go About Developing These Competencies in Teachers?

There is forever a continuing controversy over what constitutes an adequate preparation for teaching at any level. It is not likely that the issues will ever be settled, nor is it desirable that the

search for better ways be ended. Guidelines for programs to prepare teachers should be planned with reference to the aims and functions of schools in which they will teach.

In recognition of the movement toward the middle school reorganization, the future may see the development of special preparatory programs for many specialties in the middle school. During the 1966-67 year, an institute supported by the United States Office of education was held at the University of Florida to retrain personnel from the public schools of Atlanta, Georgia; Dade County (Miami), Florida; and Montgomery County, Maryland for middle schools in these systems.

The participants in the Florida program were experienced teachers with elementary and junior high school teaching and administrative backgrounds. The program consisted of three basic elements: (1) a common core of especially designed professional education course work; (2) an individually selected sequence of courses in the participant's academic teaching field, and (3) a practicum on teaching in the middle school.

The P. K. Yonge Laboratory School of the College of Education at the University furnished a model of a middle school in development. An interdisciplinary team of four teachers and approximately 120 pupils from grades six and seven gave the institute participants ample opportunity to test their ideas against reality.

Will the Middle School Preparation Program Work?

Will all of the efforts and energies expended to develop a new program consistent with newer insights pay off in improved teaching and learning situations for boys and girls? The answer is simple. No, the new program will not work. It is merely a program and programs never work. Only creative, dynamic people can make a program work. So our first task is to identify and recruit the kind of young people who will be valid models for youngsters to identify with.

And even then, even with good people and improved preparation programs, we may not succeed. For the stereotype of what teaching is supposed to be is so strong in most of our school systems that innovation has little chance to succeed. Only the total involvement of both teacher preparation institutions and public school systems can make our dream of effective middle school teachers a reality.

The program outlined above consists of several parts. The synthesis of these parts into a meaningful whole will only come, if it ever does, when completion of a preparation program is seen as merely the beginning step in becoming a teacher.

SYMPOSIUM

Participants: Dr. Maynard Cochrane, Associate Professor of Education, South Dakota State University, Brookings, South Dakota
Dr. Mary Beth Evans, Director of Teacher Education, Graceland College, Lamoni, Iowa
Mr. Floyd Keller, Assistant Superintendent, Stillwater Public Schools, Stillwater, Minnesota
Dr. Ross Nielsen, Head, Department of Teaching, University of Northern Iowa, Cedar Falls, Iowa
Dr. Emmett Williams, Director of the Middle School Institute, University of Florida, Gainesville, Florida
Mr. William Hill, UMREL, moderator

MARY BETH EVANS: Dr. Williams, you talked about preparation of teachers who had already had experience. I wonder if your program would have been quite different if you had worked with beginning teachers?

EMMETT WILLIAMS: Well, we are faced now with the problem of making recommendations for programs of preparation for the middle schools, and we have a dilemma because some of us may come up with no recommendation at all concerning undergraduates. I think what we are probably going to say is that we want a reworking of our entire program that does away with elementary-secondary preparation at the undergraduate level.

At least, we would like a preparation program that forgets about this early decision between elementary and secondary and pretty much contains common elements for all undergraduates. At our own university we are finding out that it is pretty much impossible to turn out teachers in four years anyway. I don't have any recommendations for an undergraduate program that would be much different from a good well-rounded program for any teacher. Instead, I would give the kind of on-the-job help that would allow teachers to make a synthesis of all the different things they have learned on the job.

MAYNARD COCHRANE: Last evening you expressed some reservations about the willingness of our teachers to teach in teams. I wonder if you have any ideas as to what teacher education institutions ought to be doing to get some preparation for team teaching in their teacher education curriculum?

EMMETT WILLIAMS: I think that everything we do now in the College of Education is designed to make poor team teachers. We over-emphasize the personal autonomy of the teacher in the classroom. In my own case, I left teaching after several years and went into boy scout work, where I learned that there are some situations in which it was appropriate for the district representative to take the lead, but most of the time the chief executive did. Anything we do at the College of Education which is giving the undergraduate the idea that when he is given his certificate he is a professional teacher is making it difficult for him to open up and share and have his ideas criticized and sometimes rejected, and sometimes to take leadership, sometimes to

follow. I suggest that if we're going to do that, we're going to have to start in our junior year with having even our own classes taught by half a dozen teams. The students would have to work together too; they would have to define their own roles in getting the work done, sometimes taking leadership, and sometimes following.

ROSS NEILSEN: When is a teacher really a professional teacher?

EMMETT WILLIAMS: It would be very difficult, wouldn't it, to show any correlation between the real "pro" and certain courses and certain certification requirements; and this is not to say that these things are not necessary.

COMMENT (from the audience): I think the teacher is a professional when he views himself as one. In part it's a matter of attitude.

EMMETT WILLIAMS: At the new Nova School in Ft. Lauderdale the teachers have individual offices. There is a faculty room just large enough for teams to meet. The thing that was so noticeable there is that when the teachers got together, they were excited. They had a lot of fun and they were working together on plans. One of the ingredients there was environment. They didn't have to give up their desk when someone else was in their room. They had a suite of their own, with carpeting, air-conditioning, filing cabinets, and bookcases. All you have to do is look and see what teachers do with their spare time in a building that is so barren and so sterile that it says you are a tradesman. I guess a teacher becomes a "pro" in part when he develops the attitude. And the attitude is developed when we start treating teachers like "pros."

MARY BETH EVANS: I wonder if you'd comment further on ways in which the colleges and public school people can work together on preparation of teachers?

EMMETT WILLIAMS: The University of Maryland has developed an "extern" program. As I understand it, they are going to identify early in the undergraduate experience students who can earn part of their course credit by working in the schools as teacher aides, and for this they will receive some small remuneration. That's one way: give students a taste of what it is to work in a classroom. Last night, Mr. Prasch mentioned the clinical professor. You can identify in the public school teachers who are professional personnel, who know how to work with beginning teachers, and who can do the job of supervision much better than someone from the university who drops in three or four times during the term. Part of the load of a person like this is the induction of new persons into the profession. I think their relationship with the college would be to help us to develop good preservice experiences that they feel are needed. The university could provide part of their salary. While teachers don't like to deviate from the single salary schedule, we all know that the responsibility certainly has to be compensated. We're thinking in terms of a thousand dollars extra from the university for the extra work.

I'm not very optimistic about getting very far with this, simply because the demands of teaching in the public school are so great that when you teach full time you just don't have anything left over.

MAYNARD COCHRANE: We have had some good discussion in some of the groups here about what it takes to be a successful middle school teacher. About what kind of preparation is needed, whether this should be a special kind of program. Some think that the kind of training usually given elementary teachers is the kind of training that should be given to teachers for the middle school years. Do you have any thoughts along this line?

EMMETT WILLIAMS: My friends in elementary, and generally people all around, tell me that elementary teachers do a better job than secondary teachers in human relations and in seeing all the parts of the child. But you know, I haven't seen much evidence of this. I believe something is wrong with a system that tells me that a child can adjust to only one adult.

I think elementary schools are going to have to break out of the self-contained classroom. On the other hand the departmentalization of secondary schools is even worse. So it's not an either-or, but it seems a shame to me that most elementary school teachers don't have enough time to develop a feel for scholarship in one area. We don't know what a preparation program for elementary teachers really ought to look like. And we are not at all happy with the secondary one, either.

We're probably going to move toward a common core of experience for all our prospective teachers at the undergraduate level. We would have future elementary and future secondary teachers meeting together and talking together for a lot more of their time. There would be a common core for all prospective teachers.

QUESTION: Are we not moving in many institutions toward a more specialized teacher for the elementary school?

EMMETT WILLIAMS: I don't want to give the impression that I want a specialist for the elementary school in the sense that he shuts out everything else. I probably should call him a "subject generalist," a person who has enough enthusiasm about one field to transmit it to others.

QUESTION: Are we going to be able to do that? It's going to take longer than a four-year program to turn out this kind of teacher. Or are you talking of substituting new courses for what we now give?

EMMETT WILLIAMS: What I'm saying instead is that we must stop developing the attitude that it is finished in four years and that you can keep your state certification as long as you go back once every five years. We should be starting earlier by giving pre-intern experience as a teacher aide. But I'm also saying that students should be in college five years before they start work. I think the fifth year might best be spent in an internship in a school system at a beginning teacher's pay, as long as it is understood that the supervising teacher has a reduced load, and that there is a seminar where the intern can get together with others and share his experiences and problems.

QUESTION: We are talking in the public schools of trying not to specify the amount of time a student is required to put in on a particular

subject, but instead basing what he does on performance objectives. Is anything like this being done at the university level, or do we have to continue packaging everything in terms of time?

EMMETT WILLIAMS: I think that Florida-Atlantic University at Boca Raton has something worked out on this basis. Students take a rather long comprehensive test and are given an individual syllabus based on the results of the test. Then they work in the information-retrieval center and meet at times with other students who are working on the same syllabus they are. New universities can sometimes forget about the ivy on the walls, and show that this can be done.

Of course that approach can result in nothing but busy work, just as anything can. We have looked at some of the places where individually prescribed instruction is being carried on. The whole wall in some of these schools is covered with papers in little slots, as though education is somehow in all these slots. Now, that is good for some things, for a portion of the time. One thing that is good about it is that the children always get attention right away.

But we think that the best curriculum for the middle school is a darn good adult -- the kind of human being that we want our children to grow up to be like. We want a teacher to be free to have fun with kids. And we want him to be able to stand them on tip-toe and produce. But we want to get out of the trap of thinking that middle school education has a starting point and an ending point, and that there is some kind of sequence to it. We are not interested in any kind of grouping on the basis of ability or skill. Most of the time students need an exciting adult with a lot of freedom.

SUMMARY OF CONFERENCE RESULTS
AND DIRECTION FOR THE FUTURE

by

Clifford Hooker
Conference Chairman

We've spent a good deal of time this week trying to define this new unit of school organization called the middle school. We have thought about it in terms of pupils, in terms of program, and in terms of organization. I have been impressed with the extent to which we have seen the middle school as an institution created to serve the needs of a special group of boys and girls. Dr. Popper's opening address, which talked about the "special case" of this group was most appropriate. He was supported strongly, it seems to me, by Dr. Wattenberg, who pointed out that our 9th graders today are as sophisticated as our 11th graders of a generation ago in terms of the knowledge they possess, the ways in which they use leisure time, and other kinds of behavior that would indicate level of maturity.

Some people seemed to feel that if we do develop programs to satisfy the individual differences of boys and girls at this age, there will be some problem created when they leave the middle school. Or when they finish the senior high school. We should understand that the difference between students increases after a period of effective instruction rather than decreases. Students should be less alike when they leave the school than when they entered it.

I was intrigued by the discussion of whether or not boys and girls reach physical maturity earlier now than they used to. I noticed that Dr. Popper used data primarily related to central tendencies, while Dr. Wattenberg stressed variability. Both showed us evidence that youngsters may develop a new curve of learning, a new set of behaviors around the age of puberty. This is a challenge to us. It is also an opportunity - perhaps the last opportunity - to capture the interest of boys and girls who up to that point have not participated in the educational program to their fullest. This is a very critical period in the development of a boy or girl.

Another thing we looked at was program. There were several references to continuity in the total program of education. The junior high school, as we know, was developed to bridge the gap between elementary school and high school, but for some reason we have, in many communities, created new gaps on both sides of it. Now we are trying again to provide continuity: not a disjointed program, but an endless, seamless program that would make learning exciting and comfortable throughout one's adult life as well as when he is in school. One of the three principle components of the program, according to Dr. Alexander, is development of the skills of learning - learning how to learn. This has important implications for the behavior of the teacher. The teacher

becomes a resource person, one who recognizes that he has control over only a tiny piece of an individual's total learning. The student's attitude toward learning and mastery of the skills of learning are most important.

Another thing we have seen is that exploration is possible in any subject area and in any type of experience. Sometimes I think that in the junior high school effort, we have defined exploration as giving youngsters brief exposure to a wide variety of required subjects. I would argue that exploration can be as much a part of teaching mathematics as of art. Indeed, as much a part of English as it is of industrial arts. If we have a commitment to the idea that exploration is important, we can find ways to incorporate it in whatever subject we may be teaching.

We also look at the organization of the middle school. I think that most of our speakers have assumed that grade structure will remain the central basis of organization. Little was said about assigning students to classes in terms of the maturity of the learner, and no one proposed that we use the sex of the learner as the basis of learning. However, we did make a big case of the fact that girls develop earlier than boys, and that boys have a tendency to identify with their mother up to a certain point and then perhaps with their father toward that point. It seems strange that we haven't taken a closer look at the possibilities of grouping in these middle school years at least part of the time on the basis of the sex of the learner.

We talked a lot about organization for instruction internally, and this has been perhaps the really choice part of the conference. We've had some terribly knowledgeable people, including classroom teachers, whohave talked about large group and small group instruction, independent study, and cooperative planning by teachers. While these things in and of themselves may not define the middle school, they would seem to be considerations that are essential to fulfillment of the goals we have spelled out elsewhere. So I suspect that the middle school will have to incorporate many of these concepts in order to realize its purposes.

This type of school may, then, become the change agent in the total school system in the years ahead. It may very well be looked upon as the innovative, experimental unit within the total school organization. Many of the things we have said have important implications for elementary education and secondary education.

I think that we would all agree that a school district should not adopt the middle school pattern of organization without appropriate modification of program. Let's not be accused of pulling a Madison Avenue trick on the taxpayers of our community by simply taking down one shingle and putting up another without making some significant program modifications.

Part of my assignment here is to talk about directions for the future. For one thing, state reimbursement plans will probably have to be revised. Many of our states reimburse school districts on a weighted pupil-unit basis. In other words, they provide more state aid for boys and girls in high schools than in elementary schools. In Minnesota, for example, the junior high school has been defined by state board regulations to include certain program components. So we have a real problem with regard to the development of middle schools in this particular state, and this is characteristic of state aid programs around the nation.

I think it's fair to predict that instructional material centers will replace libraries in our schools. I'm not really worried about what we call them, although I think that the term "library" does not communicate a large enough concept. This must be a place where instructional materials of a great variety are readily available for teachers and students. I suspect that many of these materials must be located at the department level or team level, at least in part. This may call for duplication of items, but when you analyze school costs, the materials you buy are terribly insignificant, really; I heard John Davis, Superintendent of Schools in Minneapolis, say recently that 92% of the current expenditures in Minneapolis are for personnel. That leaves 8% for all other things combined. So if you have to buy a duplicate of a map or a globe, or a book, I think the school district might readily afford it and the public would survive.

We will undoubtedly use more simulation in instruction. Simulation will provide the opportunity for synthesis and decision making. It will provide the opportunity for boys and girls to discover that there are many alternatives for the solution of most problems, and to examine the consequences of alternatives.

Personnel problems will be enormous. We have in Minnesota today a shortage of some 800 classroom teachers. This is in spite of fairly competitive salaries paid in the state as compared with its neighbors. There is a surplus of secondary teachers in some departments - not in all - but certification standards being what they are, there is not the flexibility of mobility that might help solve the problem.

I take a fairly pessimistic attitude toward the possibility that teacher education institutions will be able to respond to the needs of the middle school. It seems to me that new, exciting programs for teacher education will be developed within operating school districts for the most part, perhaps in a few experimental institutions. I am saying further that inservice education will be required, and I believe that to stand by and wait for the colleges and universities to say that they are ready to help out will take too long. These institutions do not have the staff, we don't have the resources, and I must say that some don't have the commitment. I think the best kind of inservice education is a group of teachers from one school district working together on a problem important to them.

I am worried about what the "establishment" will have to say about certification of teachers for the middle school years. We would find our own faculty dividing up and fighting over this issue. State departments of education are going to get "caught in a bind" on this one.

We will make wider use of paraprofessionals, it seems to me. The people in the universities talk about "teaching assistants." These are graduate students working on advanced degrees. Why not have teaching assistants in our schools? Teachers in training might, as part of their training and as a way of supporting their education, go into school systems to work with teaching teams and to learn something about what is going on in schools.

I would like to argue, too, that we make more use of part-time teachers: talented, skilled adults who would be interested in part-time employment, no more than perhaps one or two days a week, no more than one or two classes that might meet one or more days a week. But try this out in the rigid schedule we have had until now. Surely we will find some better way to make use of the part-time personnel who would be available.

I want to end this summation by saying that I'm not sure whether we are talking about a middle school or a "muddle school." It will depend somewhat on how we solve the problems that we have raised this week.

CONFERENCE EVALUATION

On the last day of the conference, all participants were asked to complete an evaluation form and to return it, unsigned, either immediately or within a few days of their return home. The responses quoted below are taken from the 45 forms which were returned.

Question: This conference focused on the preparation of teachers for the middle school years. Do you think that this was an appropriate theme?

"I feel the theme of the conference was most appropriate. Everything that occurs within the confines of a middle school or any school is determined by the competence of the teachers involved."

"UMREL made it crystal clear that they were not necessarily advocating the middle school concept, but were merely serving as a platform for open discussion of the topic."

"If this was the focus, I felt that other areas overshadowed it. These areas were team teaching, characteristics of child, and organization (programing, etc.)."

"This theme of teacher preparation is the number one problem before us today."

"Yes, but I am not sure that preservice education should be different for various levels of teachers. Inservice and internships might best provide for the difference."

"Too many people are leaving with questions unanswered."

"I think a theme of this type is not only appropriate but essential. The gap existing between the need for trained Junior High School teachers and the availability of such teachers is extreme."

Question: What do you think of the way the conference was organized? (strengths, weaknesses)

"The organization was excellent. The UMREL staff is to be commended for its planning and organization."

"I can see no way it could be improved."

"I feel that the groups which combined schools for discussion purposes were particularly effective."

"I think question and answer periods immediately after the main speakers would have been better than symposiums."

"If in the future, this is done, I would suggest making the assignment to the groups definite sooner, and perhaps some prestructured problems for the group to wrestle with--and be prepared for--before the meeting is convened."

"Conference was too long. Could have ended Wednesday evening."

"A bit too long--approximately three days could have been sufficient... (It) gave us the positive and negative views of the middle school, thus allowing us the opportunity to form an objective conclusion on this matter."

"Perhaps if there would have been information centers following the last session for two or three days, people could have consulted people in the 'know how'."

"More conferences of this type should be held for personnel at the classroom teacher level . . . "

"The administrators and college professors outnumbered the teachers five to one. It is my confirmed belief that these odds should be changed around."

Question: Did you get any new ideas or new information from the conference which will be helpful to you during the coming year?

"I think that the most significant positive benefit of the conference was the continuing theme that Middle School aged youngsters require certain unique kinds of instructional activities. I think that many of the participants in the conference, particularly school administrators and teachers, were jolted into a re-evaluation of the goals for middle school programs."

"I felt I received a great deal of worthwhile information. The middle school must be different than our present junior high, and this can be changed by using behavioral objectives rather than content materials as a goal. The ideas and insight I received on team teaching make me enthusiastic and realize it can and will work."

"I did not agree with all the speakers, but this too was good for it made me evaluate my philosophy."

"You don't realize how many 'fixations' you really have until you rub shoulders with so many others who are breaking with traditions."

"I feel that we have received information on the responsibilities of the local district in the inservice upgrading of their teaching personnel."

"We certainly are going to take a new look at our teacher preparation program in the light of the things we heard here."

Question: Did you find this conference different in any way from other conferences you have attended?

"Yes, it was held long enough to get into many categories in some depth; it had more variety than most conferences; everything that was scheduled related to the purposes of the conference."

"Certainly different in that never before have I heard speakers who session after session kept us interested and thinking. The general session speakers were unusually fine and I feel it has been a real pleasure to take part in this conference."

"The wealth of human resources was the greatest strength of the conference . . . of teachers, college professors, administrators, ... rarely do these people participate together in conferences."

"The mixture of persons in attendance was well constructed. The intermingling of persons from all levels of education provided for meaningful discussion."

General Comments:

"As a teacher I feel privileged to have been allowed to share in the early discussions and planning for the new middle school. In addition

to information I also received inspiration and reinforcement which will give me the courage to try innovation . . ."

"The need for such a conference has been apparent for decades . . . perhaps the most significant outcome of the entire conference was the broadening of our total view of what we are trying to do and why we are trying to do it."

"This conference will stand out as one of the best that I have attended. It was far superior to the typical conference. I heard this same type of comment from many individuals while in Duluth."

"I really feel that I gained immeasurably--especially in the form of support for ideas we are planning to incorporate in our campus laboratory middle school. Had I been able to anticipate the extent to which some of our concerns would be dealt with in the conference, I would have sought permission for more of our staff members to attend."

"I honestly feel that it was one of the better conferences that I have been privileged to attend. . . I feel that we really got an insight of the middle school, its functions and how better to deal with this age group."

"Quite frankly, I feel the laboratory has made its most significant contribution with this conference. Not necessarily through the theme of the Middle School, but rather by drawing grass roots activators together from the area."

"A delightful experience in interchange and exchange of ideas between teacher training institutions and public school people. We need more of this type of communication."

"It turned out to be one of the most stimulating conferences I have ever attended."

"The most valuable five days I have spent at any conference."